



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/596,749

09/17/2007

Stefan Karlsson

P18687-US1

1068

27045 7590 03/08/2010
ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR 1-C-11
PLANO, TX 75024

EXAMINER

TAYLOR, BARRY W

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

03/08/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,749	Applicant(s) KARLSSON, STEFAN	
	Examiner Barry W. Taylor	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-21 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. Applicants amendment to the specification (see paper dated 6/22/2006) has been approved and entered.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 14-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 14. The claim recites a computer program embodied on a computer readable medium comprising program instructions for causing a computer to perform the method of claim 1.

The Examiner notes that Applicants specification at paragraph 0060 (Pub. No.: 2008/0188199) defines the medium to be inclusive of a carrier wherein the carrier can be any entity or device capable of carrying a program. For example, the carrier may be a record medium, computer memory, read-only memory or an electrical carrier signal. It is clear that the medium can be in the form of signal(s) which is non-statutory.

The Examiner suggests amending the claim to positively recite the "**non-transitory computer readable medium**".

Regarding claim 15. Claim 15 recites the computer program embodied on a computer readable carrier and comprising computer executable instructions for causing a computer to perform the method according to claim 1.

The Examiner notes that Applicants specification at paragraph 0060 (Pub. No.: 2008/0188199) defines the medium to be inclusive of a carrier wherein the carrier can be any entity or device capable of carrying a program. For example, the carrier may be a record medium, computer memory, read-only memory or an electrical carrier signal. It is clear that the medium can be in the form of signal(s) which is non-statutory.

The Examiner suggests amending the claim to positively recite the "**non-transitory computer readable medium**".

Regarding claim 16. Claim 16 recites wherein said carrier is a record medium, computer memory, read-only memory, **or an electrical carrier signal**.

The Examiner notes that Applicants specification at paragraph 0060 (Pub. No.: 2008/0188199) defines the medium to be inclusive of a carrier wherein the carrier can be any entity or device capable of carrying a program. For example, the carrier may be a record medium, computer memory, read-only memory or an electrical carrier signal. It is clear that the medium can be in the form of signal(s) which is non-statutory.

The Examiner suggests amending the claim to positively recite the "**non-transitory computer readable medium**".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2617

3. Claims 1-2 and 4-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kundrof (6,553,217) found in related application 10/512,836 in view of Rodrigo (2003/0074286).

Regarding claim 1. Kundrof teaches a method for generating rating notification to a user of a requested service in a communications system, comprising the steps of:

traversing a tariff structure (col. 6 lines 1-59, col. 7 lines 32-67);

during the traversing, detecting one or more notification requests for intermediate conditions; and

sending one or more notifications resulting from said one or more notifications requests to the user (col. 7 lines 62-67, col. 8 lines 45-54).

Kundrof does not explicitly show **during the traversing**, detecting one or more notification requests for intermediate conditions.

Rodrigo also teaches Advice of Charge (paragraphs 0056, 0068-0069, 0085) in order to provide user's with real-time charge information, as well as, server as a reminder to the user to replenish the account. Rodrigo teaches using an intelligent charging edge to provide an interface between network elements (paragraphs 0035-0036) thereby allowing customized solutions to postpaid, prepaid, direct pay, and other real-time or non-real-time payment methodologies. Rodrigo teaches the intelligent charging edge, essentially isolates the network elements and allows for third party integration (paragraph 0040). Rodrigo teaches using an intelligent charging edge bridge that is used as an intelligent interface between then network and Operation Support Systems (paragraphs 0006, 0043, 0053, 0055) and performs a variety of

Art Unit: 2617

functions including rule-based data transformations and interface management operations. Rodrigo teaches the bridge can determine that the rules are to be collectively considered, such that all or a portion of the collected charging information is used to create one or more charging events (paragraphs 0046, 0064-0069, 0073-0074, 0082). Rodrigo teaches the bridge can be a distinct module or may be integrated with another module (paragraph 0050). Rodrigo teaches messages could be combined before providing AoC to user's (paragraphs 0059-0060, 0082-0085). **More importantly, Rodrigo teaches the AoC, which allows customers to query the approximate charge for the call or service, may also be configured into business rules and managed by the bridge and in the case of prepaid services where an account balance is maintained by a backend system, messages such as top-up messages and bar/unbar messages may be invoked in the backend system via application of rules in the bridge** (paragraph 0085). Rodrigo teaches the bridge, in connection with the rules, can thus handle all transactions related to a single message in a transaction-safe manner (paragraph 0085). Rodrigo teaches other messages may be provided to the user during the traversing of a tariff structure (**see paragraphs 0085 and 0091 wherein the bridge uses rules to trigger notifications to be sent to the user**).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the teachings of Kundrof to incorporate the intelligent charging bridge as taught by Rodrigo in order to allow service providers the ability to customize

Art Unit: 2617

rules to trigger notifications that are to be applied to real-time and non-real-time payment methodologies as disclosed by Rodrigo.

Regarding claim 2. Kundrof does not teaches after the step of detecting said one or more notification requests, the further steps of: analysing said detected one or more notification requests to determine if the notification should be sent directly to the user or to be collected for post-analysis; and

if the notification is determined to be sent directly, sending said one or more notifications to the user, else, storing said one or more notification request for post-analysis.

Rodrigo also teaches Advice of Charge (paragraphs 0056, 0068-0069, 0085) in order to provide user's with real-time charge information, as well as, server as a reminder to the user to replenish the account. Rodrigo teaches using an intelligent charging edge to provide an interface between network elements (paragraphs 0035-0036) thereby allowing customized solutions to postpaid, prepaid, direct pay, and other real-time or non-real-time payment methodologies. Rodrigo teaches the intelligent charging edge, essentially isolates the network elements and allows for third party integration (paragraph 0040). Rodrigo teaches using an intelligent charging edge bridge that is used as an intelligent interface between then network and Operation Support Systems (paragraphs 0006, 0043, 0053, 0055) and performs a variety of functions including **rule-based** data transformations and interface management operations. Rodrigo teaches the bridge can determine that the rules are to be collectively considered, such that all or a portion of the collected charging information is

Art Unit: 2617

used to create one or more charging events (paragraphs 0046, 0064-0069, 0073-0074, 0082). Rodrigo teaches the bridge can be a distinct module or may be integrated with another module (paragraph 0050). Rodrigo teaches messages could be combined before providing AoC to user's (paragraphs 0059-0060, 0082-0085). **More importantly, Rodrigo teaches the AoC, which allows customers to query the approximate charge for the call or service, may also be configured into business rules and managed by the bridge and in the case of prepaid services where an account balance is maintained by a backend system, messages such as top-up messages and bar/unbar messages may be invoked in the backend system via application of rules in the bridge** (paragraph 0085). Rodrigo teaches the bridge, in connection with the rules, can thus handle all transactions related to a single message in a transaction-safe manner (paragraph 0085). Rodrigo teaches other messages may be provided to the user during the traversing of a tariff structure (**see paragraphs 0085 and 0091 wherein the bridge uses rules to trigger notifications to be sent to the user**). Rodrigo teaches if the notification is to be sent directly, sending one or more notifications to the user (see prepaid or direct pay scenario in paragraph 0091), else storing the one or more notifications for post-analysis (see postpaid scenario in paragraph 0091).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the teachings of Kundrof to incorporate the intelligent charging bridge as taught by Rodrigo in order to allow service providers the ability to directly send top-up messages when in prepaid scenario since data is needed in real-time or store

Art Unit: 2617

notifications when in post-paid scenario since data is not needed for real-time processing.

Regarding claim 4. Kundrof does not show the step of merging one or more messages before they are sent to the user.

Rodrigo teaches using an intelligent charging edge bridge that is used as an intelligent interface between then network and Operation Support Systems (paragraphs 0006, 0043, 0053, 0055) and performs a variety of functions including **rule-based** data transformations and interface management operations. Rodrigo teaches the bridge can determine that the rules are to be **collectively considered, such that all or a portion** of the collected charging information is used to create one or more charging events (paragraphs 0046, 0064-0069, 0073-0074, 0082). Rodrigo teaches the AoC, which allows customers to query the approximate charge for the call or service, may also be configured into business rules and managed by the bridge and in the case of prepaid services where an account balance is maintained by a backend system, messages such as top-up messages and bar/unbar messages may be invoked in the backend system via application of rules in the bridge (paragraph 0085).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the teachings of Kundrof to incorporate the intelligent charging bridge as taught by Rodrigo in order to allow service providers the ability to customize rules to trigger notifications that are to be applied to real-time and non-real-time payment methodologies as disclosed by Rodrigo.

Art Unit: 2617

Regarding claim 5. Kundrof teaches wherein the merging is determined by a merging logic.

Rodrigo teaches using an intelligent charging edge bridge that is used as an intelligent interface between then network and Operation Support Systems (paragraphs 0006, 0043, 0053, 0055) and performs a variety of functions including **rule-based** data transformations and interface management operations. Rodrigo teaches the bridge can determine that the rules are to be **collectively considered, such that all or a portion** of the collected charging information is used to create one or more charging events (paragraphs 0046, 0064-0069, 0073-0074, 0082). Rodrigo teaches the AoC, which allows customers to query the approximate charge for the call or service, may also be configured into business rules and managed by the bridge and in the case of prepaid services where an account balance is maintained by a backend system, messages such as top-up messages and bar/unbar messages may be invoked in the backend system via application of rules in the bridge (paragraph 0085).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the teachings of Kundrof to incorporate the intelligent charging bridge as taught by Rodrigo in order to allow service providers the ability to customize rules to trigger notifications that are to be applied to real-time and non-real-time payment methodologies as disclosed by Rodrigo.

Regarding claim 6. Kundrof teaches wherein said analysis is run on enquiry; before, during or after session/call/purchase (col. 6 lines 1-59, col. 7 lines 32-67);

Rodrigo teaches wherein the said analysis is run before, during, or after refill (paragraphs 0056, 0068-0069, 0084-0085).

Regarding claim 7. Kundrof teaches wherein said one or more notification requests are for price enquiries (col. 7 lines 62-67, col. 8 lines 45-54).

Rodrigo also teaches wherein said one or more notification request are for price enquires (paragraphs 0056, 0068-0069, 0084-0085).

Regarding claim 9. Kundrof does not show wherein specific triggers notification requests in the tariff structure triggers notifications that can either be issued in real-time or collected for further processing.

Rodrigo also teaches Advice of Charge (paragraphs 0056, 0068-0069, 0085) in order to provide user's with real-time charge information, as well as, server as a reminder to the user to replenish the account. Rodrigo teaches using an intelligent charging edge to provide an interface between network elements (paragraphs 0035-0036) thereby allowing customized solutions to postpaid, prepaid, direct pay, and other real-time or non-real-time payment methodologies. Rodrigo teaches the intelligent charging edge, essentially isolates the network elements and allows for third party integration (paragraph 0040). Rodrigo teaches using an intelligent charging edge bridge that is used as an intelligent interface between then network and Operation Support Systems (paragraphs 0006, 0043, 0053, 0055) and performs a variety of functions including **rule-based** data transformations and interface management operations. Rodrigo teaches the bridge can determine that the rules are to be collectively considered, such that all or a portion of the collected charging information is

Art Unit: 2617

used to create one or more charging events (paragraphs 0046, 0064-0069, 0073-0074, 0082). Rodrigo teaches the bridge can be a distinct module or may be integrated with another module (paragraph 0050). Rodrigo teaches messages could be combined before providing AoC to user's (paragraphs 0059-0060, 0082-0085). **More importantly, Rodrigo teaches the AoC, which allows customers to query the approximate charge for the call or service, may also be configured into business rules and managed by the bridge and in the case of prepaid services where an account balance is maintained by a backend system, messages such as top-up messages and bar/unbar messages may be invoked in the backend system via application of rules in the bridge** (paragraph 0085). Rodrigo teaches the bridge, in connection with the rules, can thus handle all transactions related to a single message in a transaction-safe manner (paragraph 0085). Rodrigo teaches other messages may be provided to the user during the traversing of a tariff structure (**see paragraphs 0085 and 0091 wherein the bridge uses rules to trigger notifications to be sent to the user**). Rodrigo teaches if the notification is to be sent directly, sending one or more notifications to the user (see prepaid or direct pay scenario in paragraph 0091), else storing the one or more notifications for post-analysis (see postpaid scenario in paragraph 0091).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the teachings of Kundrof to incorporate the intelligent charging bridge as taught by Rodrigo in order to allow service providers the ability to directly send top-up messages when in prepaid scenario since data is needed in real-time or store

Art Unit: 2617

notifications when in post-paid scenario since data is not needed for real-time processing.

Regarding claim 10. Kundrof does not teach wherein one or more condition that is fulfilled is sent to an external notification process for analysis.

Rodrigo also teaches Advice of Charge (paragraphs 0056, 0068-0069, 0085) in order to provide user's with real-time charge information, as well as, server as a reminder to the user to replenish the account. Rodrigo teaches using an intelligent charging edge to provide an interface between network elements (paragraphs 0035-0036) thereby allowing customized solutions to postpaid, prepaid, direct pay, and other real-time or non-real-time payment methodologies. Rodrigo teaches the intelligent charging edge, essentially isolates the network elements and allows for third party integration (paragraph 0040). Rodrigo teaches using an intelligent charging edge bridge that is used as an intelligent interface between then network and Operation Support Systems (paragraphs 0006, 0043, 0053, 0055) and performs a variety of functions including rule-based data transformations and interface management operations. Rodrigo teaches the bridge can determine that the rules are to be collectively considered, such that all or a portion of the collected charging information is used to create one or more charging events (paragraphs 0046, 0064-0069, 0073-0074, 0082). Rodrigo teaches the bridge can be a distinct module or may be integrated with another module (paragraph 0050). Rodrigo teaches messages could be combined before providing AoC to user's (paragraphs 0059-0060, 0082-0085). **More importantly, Rodrigo teaches the AoC, which allows customers to query the**

Art Unit: 2617

approximate charge for the call or service, may also be configured into business rules and managed by the bridge and in the case of prepaid services where an account balance is maintained by a backend system, messages such as top-up messages and bar/unbar messages may be invoked in the backend system via application of rules in the bridge (paragraph 0085). Rodrigo teaches the bridge, in connection with the rules, can thus handle all transactions related to a single message in a transaction-safe manner (paragraph 0085). Rodrigo teaches other messages may be provided to the user during the traversing of a tariff structure (**see paragraphs 0085 and 0091 wherein the bridge uses rules to trigger notifications to be sent to the user**). Rodrigo teaches using an external notification system (see paragraph 0041 wherein migrating charging and billing operations away from the network elements). Rodrigo teaches the bridge may be a distinct module or may be integrated with another module (paragraphs 0050, 0066, 0074).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the teachings of Kundrof to incorporate the intelligent charging bridge as taught by Rodrigo which migrates the charging and billing operations away from the network thereby allowing the network elements to divorce themselves from the charging issue, and instead focus on the service it provides (Rodrigo paragraph 0041).

Regarding claim 11. Kundrof does not show wherein a log of how the tariff structure has been traversed is created and processed after the analyses for generating a notification(s).

Rodrigo also teaches Advice of Charge (paragraphs 0056, 0068-0069, 0085) in order to provide user's with real-time charge information, as well as, server as a reminder to the user to replenish the account. Rodrigo teaches using an intelligent charging edge to provide an interface between network elements (paragraphs 0035-0036) thereby allowing customized solutions to postpaid, prepaid, direct pay, and other real-time or non-real-time payment methodologies. Rodrigo teaches the intelligent charging edge, essentially isolates the network elements and allows for third party integration (paragraph 0040). Rodrigo teaches using an intelligent charging edge bridge that is used as an intelligent interface between then network and Operation Support Systems (paragraphs 0006, 0043, 0053, 0055) and performs a variety of functions including rule-based data transformations and interface management operations. Rodrigo teaches the bridge can determine that the rules are to be collectively considered, such that all or a portion of the collected charging information is used to create one or more charging events (paragraphs 0046, 0064-0069, 0073-0074, 0082). Rodrigo teaches the bridge can be a distinct module or may be integrated with another module (paragraph 0050). Rodrigo teaches messages could be combined before providing AoC to user's (paragraphs 0059-0060, 0082-0085). **More importantly, Rodrigo teaches the AoC, which allows customers to query the approximate charge for the call or service, may also be configured into business rules and managed by the bridge and in the case of prepaid services where an account balance is maintained by a backend system, messages such as top-up messages and bar/unbar messages may be invoked in the backend system via**

Art Unit: 2617

application of rules in the bridge (paragraph 0085). Rodrigo teaches the bridge, in connection with the rules, can thus handle all transactions related to a single message in a transaction-safe manner (paragraph 0085). Rodrigo teaches other messages may be provided to the user during the traversing of a tariff structure (**see paragraphs 0085 and 0091 wherein the bridge uses rules to trigger notifications to be sent to the user**). Rodrigo teaches in the case of postpaid scenario, the charging and billing system may simply accept information provided by the bridge, and utilize the information in performing postpaid charging and billing functions (paragraph 0091).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the teachings of Kundrof to incorporate the intelligent charging bridge as taught by Rodrigo in order to allow service providers the ability to directly send top-up messages when in prepaid scenario since data is needed in real-time or store notifications when in post-paid scenario since data is not needed for real-time processing.

Regarding claim 12. Kundrof does not show wherein the conditions affect the result being determined.

Rodrigo also teaches Advice of Charge (paragraphs 0056, 0068-0069, 0085) in order to provide user's with real-time charge information, as well as, server as a reminder to the user to replenish the account. Rodrigo teaches using an intelligent charging edge to provide an interface between network elements (paragraphs 0035-0036) thereby allowing customized solutions to postpaid, prepaid, direct pay, and other real-time or non-real-time payment methodologies. Rodrigo teaches the intelligent

Art Unit: 2617

charging edge, essentially isolates the network elements and allows for third party integration (paragraph 0040). Rodrigo teaches using an intelligent charging edge bridge that is used as an intelligent interface between then network and Operation Support Systems (paragraphs 0006, 0043, 0053, 0055) and performs a variety of functions including rule-based data transformations and interface management operations. Rodrigo teaches the bridge can determine that the rules are to be collectively considered, such that all or a portion of the collected charging information is used to create one or more charging events (paragraphs 0046, 0064-0069, 0073-0074, 0082). Rodrigo teaches the bridge can be a distinct module or may be integrated with another module (paragraph 0050). Rodrigo teaches messages could be combined before providing AoC to user's (paragraphs 0059-0060, 0082-0085). **More importantly, Rodrigo teaches the AoC, which allows customers to query the approximate charge for the call or service, may also be configured into business rules and managed by the bridge and in the case of prepaid services where an account balance is maintained by a backend system, messages such as top-up messages and bar/unbar messages may be invoked in the backend system via application of rules in the bridge** (paragraph 0085). Rodrigo teaches the bridge, in connection with the rules, can thus handle all transactions related to a single message in a transaction-safe manner (paragraph 0085). Rodrigo teaches other messages may be provided to the user during the traversing of a tariff structure (**see paragraphs 0085 and 0091 wherein the bridge uses rules to trigger notifications to be sent to the user**).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the teachings of Kundrof to incorporate the intelligent charging bridge as taught by Rodrigo in order to allow service providers the ability to customize rules to trigger notifications that are to be applied to real-time and non-real-time payment methodologies as disclosed by Rodrigo.

Regarding claim 13. Kundrof does not show wherein the notification is sent to another destination than the terminal involved in the chargeable session.

Rodrigo also teaches Advice of Charge (paragraphs 0056, 0068-0069, 0085) in order to provide user's with real-time charge information, as well as, server as a reminder to the user to replenish the account. Rodrigo teaches using an intelligent charging edge to provide an interface between network elements (paragraphs 0035-0036) thereby allowing customized solutions to postpaid, prepaid, direct pay, and other real-time or non-real-time payment methodologies. Rodrigo teaches the intelligent charging edge, essentially isolates the network elements and allows for third party integration (paragraph 0040). Rodrigo teaches using an intelligent charging edge bridge that is used as an intelligent interface between then network and Operation Support Systems (paragraphs 0006, 0043, 0053, 0055) and performs a variety of functions including **rule-based** data transformations and interface management operations. Rodrigo teaches the bridge can determine that the rules are to be collectively considered, such that all or a portion of the collected charging information is used to create one or more charging events (paragraphs 0046, 0064-0069, 0073-0074, 0082). Rodrigo teaches the bridge can be a distinct module or may be integrated with

Art Unit: 2617

another module (paragraph 0050). Rodrigo teaches messages could be combined before providing AoC to user's (paragraphs 0059-0060, 0082-0085). **More importantly, Rodrigo teaches the AoC, which allows customers to query the approximate charge for the call or service, may also be configured into business rules and managed by the bridge and in the case of prepaid services where an account balance is maintained by a backend system, messages such as top-up messages and bar/unbar messages may be invoked in the backend system via application of rules in the bridge** (paragraph 0085). Rodrigo teaches the bridge, in connection with the rules, can thus handle all transactions related to a single message in a transaction-safe manner (paragraph 0085). Rodrigo teaches other messages may be provided to the user during the traversing of a tariff structure (**see paragraphs 0085 and 0091 wherein the bridge uses rules to trigger notifications to be sent to the user**). Rodrigo teaches using an external notification system (see paragraph 0041 wherein migrating charging and billing operations away from the network elements). Rodrigo teaches the bridge may be a distinct module or may be integrated with another module (paragraphs 0050, 0066, 0074).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the teachings of Kundrof to incorporate the intelligent charging bridge as taught by Rodrigo which migrates the charging and billing operations away from the network thereby allowing the network elements to divorce themselves from the charging issue, and instead focus on the service it provides (Rodrigo paragraph 0041).

Regarding claim 14. Program claim 14 is rejected for the same reasons as method claim 1 since the recited method would perform the claimed program steps.

Regarding claim 15. Program claim 15 is rejected for the same reasons as method claim 1 since the recited method would perform the claimed program steps.

Regarding claim 16. Program claim 16 is rejected for the same reasons as method claim 1 since the recited method would perform the claimed program steps.

Regarding claim 17. Kundrof teaches a system for generating rating notification(s) to a user in a communications system including a computer apparatus adapted to perform the method of any of the claims 1 ((col. 6 lines 1-59, col. 7 lines 32-67, col. 8 lines 45-54)

Regarding claim 18. Kundrof teaches wherein said system is operating in a mobile communications system (title, abstract).

Regarding claim 19. Rodrigo teaches wherein said system is an Internet protocol based protocol or a common channel signaling system (paragraphs 0002, 0034, 0039, 0050, 0061, 0094, 0095, 0096, 0104).

Regarding claim 20. Rodrigo teaches wherein said service is a prepaid service (paragraphs 004, 0056, 0068, 0069, 0084, 0085.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kundrof (6,553,217) found in related application 10/512,836 in view of Rodrigo (2003/0074286) further in view of Ear (2005/0009500).

Regarding claim 8. Kundrof in view of Rodrigo do not show wherein all conditions fulfilled during traversal is output as a log, wherein said log is processed in a

Art Unit: 2617

subsequent step by a separate process to analyse the performed rating and produce corresponding one or more notifications.

Ear also teaches Advice of Charge in conjunction with prepaid and post paid methodologies (paragraph 0106). Ear teaches logs for prepaid events and postpaid events (paragraph 0040). Ear teaches logs are used in case the remote billing server is not available (paragraph 0044). Ear teaches the billing extension module can handle events immediately or save for handling later (paragraphs 0045-0046) which allows for prepaid events to be tracked. Ear teaches by default, prepaid events are handled in real-time and near real-time and postpaid events are logged for later handling (paragraphs 0047). Ear teaches in the event the server is not available, the billing extension module will **default to near real-time handling of the events. The events are logged into the real-time CDR wherein it can be processed by another process that is to be built by a system integrator. This allows prepaid events to be handled out of line with message flow** (paragraphs 0048, 0050).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the teachings of Kundrof in view of Rodrigo to log events as taught by Ear so that when the billing server is not available the system will **default to a near real-time process** thereby allowing for prepaid events to be processed in near real-time.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kundrof (6,553,217) found in related application 10/512,836 in view of Rodrigo (2003/0074286) further in view of Chan (2006/0003736).

Regarding claim 21. Kundrof in view of Rodrigo do not explicitly show the service is an electronic commerce/payment service.

Chan also teaches Advice of Charge for prepaid service (paragraphs 0015, 0034, 0043-0046, 0051, 0054). Chan teaches the user is presented with multiple payment options for recharging the account including e-wallet or some other type of electronic payment (paragraph 0066).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the teachings of Kundrof in view of Rodrigo to present the user with multiple payment options as taught by Chan in order to provide a more flexible system that allows users the ability to pay for prepaid services via e-wallet or some other type of electronic payment option.

Allowable Subject Matter

6. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Thursday, 6:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kent Chang, can be reached at (571) 272-7667. The central facsimile phone number for this group is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

Art Unit: 2617

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Centralized Delivery Policy: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the central fax number **(571-273-8300)**.

/Barry W Taylor/

Primary Examiner, Art Unit 2617